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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/867,924

05/30/2001

Blake J. Roessler

UM-06191

7554

7590

06/16/2006

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EXAMINER

FUBARA, BLESSING M

ART UNIT

PAPER NUMBER

1618

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/867,924	BLAKE J. ROESSLER	
	Examiner	Art Unit	
	Blessing M. Fubara	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/03/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner acknowledges receipt request for reconsideration and remarks filed 3/27/06.

Claims 25-59 are pending.

Claim Rejections - 35 USC § 102

1. The rejection of claims 25-59 are rejected under 35 U.S.C. 102(a) as being anticipated by Bielinska et al. ("Application of membrane-based dendrimer/DNA complexes for solid phase transfection in vitro and in vivo," in Biomaterials, 21 (2000), pages 877-887) is withdrawn in view of applicants' declaration under rule 1.132 which removes the publication as prior art under 102(a). *In re Katz applies.*

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foldvari et al. ("Cutaneous vaccination: the skin as an immunologically active tissue and the challenge of antigen delivery," in Journal of Controlled Release, Volume 66, Issues 2-3, 15 May 2000, Pages 199-214) and Baker et al. ("Regulation of in vivo gene expression using antisense oligonucleotides or antisense expression plasmids transfected using starburst PAMAM dendrimers," in Nucleic Acids Research, 1996, Vol. 24, No. 11, pp 2176-2182) in view of Park et al. (US 6,267,987)

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4. Foldvari discloses transdermal delivery of protein or nucleotide to the skin tissue (pp. 71-86). Foldvari discloses on page 205 that dendrimers are known to deliver DNA. Baker discloses the use of dendrimers to deliver DNA (pp 2176-2182).

The combination of Foldvari and Baker discloses the use of dendrimers for the delivery of proteins or DNA. The combined reference failed to disclose the presence of polyester for the delivery. But Park discloses polyesters as carriers for delivery of nucleic acids. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the combined teaching of Foldvari and Baker for the delivery of DNA or protein. One having ordinary skill in the art would have been motivated to incorporate polyesters with dendrimer and expect to successfully deliver DNA.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saltzman et al. ("Materials for protein delivery in tissue engineering," in Advanced Drug Delivery Reviews, Vol. 33, 1998, pp 71-86) discloses controlled protein delivery using polymeric materials.

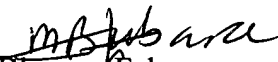
Tormalia et al. (US 5,338,532) discloses the use of starburst dendrimers for delivery of biologically active agents (column 1, lines 41-44).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Blessing Fubara
Patent Examiner
Tech. Center 1600